

New Power Applications

BA-8180/U Zinc Air Battery



- 12/24V, 800 Watt-hr, 56Ahr, 6lbs non-rechargeable battery
- External alternative to the BA-5590, interface adapters available
- Can replace up to 7 BA-5590's for extended missions

BA-5390/U Non-rechargeable battery



- Lithium Manganese Dioxide Battery Technology
- Delivers up to 50% more energy than the BA-5590/U
- NSN 6135-01-501-0833

8 – Pack Scavenger



- Portable Multi-Input 8-AA 100 Minute charger
- Extends Mission Times Lightens Soldier Loads Reduces Logistics Lowers Costs

BA-5590A/U Battery with State of Charge Indicator



- Same electrical features as the BA-5590
- State of Charge Indicator
- NSN 6135-01-523-3037

SNAP-90



- NSN 6130-01-510-9608
- Powers any Device that uses a BA-5590
- Provides multiple power connections off a Military Vehicle Platform

NPJ - NATO Power Jack



- NSN 6130-01-532-2038
- Powers any Device that uses a BA-5590

Capabilities

- Product Research & Development
- Prototype Manufacturing/Testing
- Power Assessments
- Life Cycle Cost Analysis
- Standardization
- Testing & Evaluation
 - Production Lot Acceptance Testing
 - First Article Testing
 - Independent (3rd Party) Product Evaluation Testing
- Acquisition Planning
- Engineering Consulting and Support
 - Quality Assurance
 - Production Engineering
 - Specification Development & Source Selection
 - Safety Evaluations
- Incident Investigations
- Field Support
- Technical Assistance

Customers Include:
DLA, PM FSS, PM CSS,
PM WIN-T (JTRS),
PM TRCS (CSEL), and
PM SWAR

One Vision. One Mission:
THE WARFIGHTER

TEAM  C4ISR

"Technology to the Warfighter Quicker"

Power Applications Branch

Army Power Division



Mission Statement:

To develop safe, innovative, and cost effective solutions that meet the warfighter's power and energy needs today and into the future

FORT MONMOUTH, NEW JERSEY



Army Power Division Power Applications Branch

The Best in Portable and Mobile Power Life Cycle Support

As the Army evolves to meet changing threats, there is an ever-increasing reliance on electronics and electronic devices. The warfighter is using more sophisticated electronics in sensors, communications, and weaponry, which is significantly increasing his/her power and energy demands.

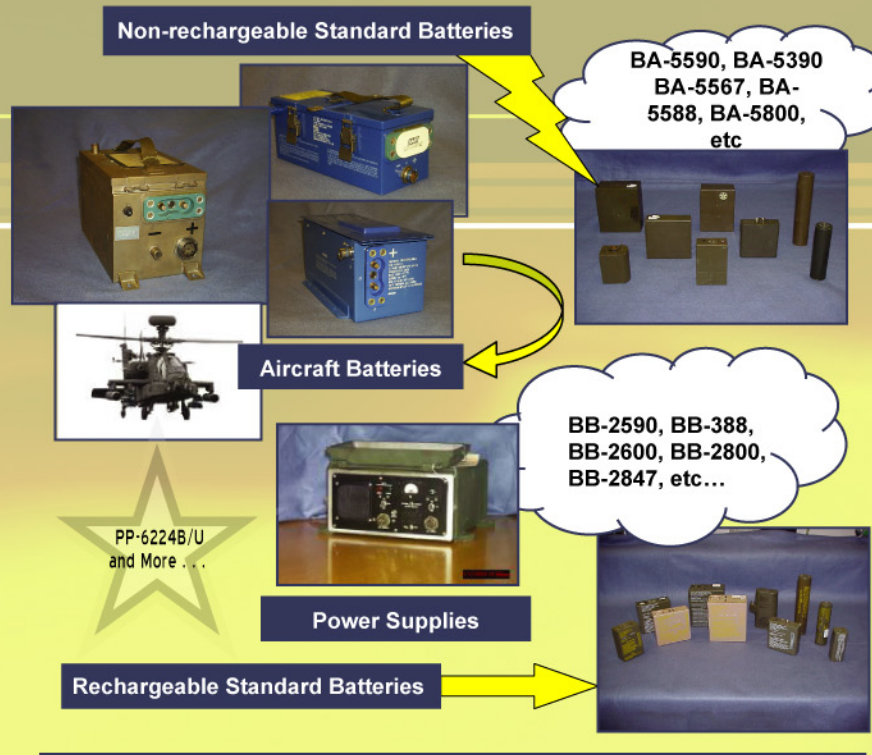
The CERDEC Power Applications Branch is developing safe, technically innovative and cost effective solutions to meet the warfighter's portable and mobile power and energy needs today and into the future for all platforms: land, sea, and air.

Over the last few years, we introduced a wide range of state-of-the-art technology to meet the warfighter power demands, such as: 1) "smart" portable chargers for the military standard communications and electronics batteries with the ability to recharge future batteries as soon as they are introduced; 2) lithium-ion rechargeable and higher capacity non-rechargeable batteries which increased system operation times; 3) zinc-air batteries which can be used as rechargers or as the main power source; 4) shelterized battery maintenance systems; 5) photovoltaic systems; and 6) power distribution systems.

Our technologies ensure that warfighters maintain their global technological superiority in the areas of mobility, sustainability, survivability and deployability.

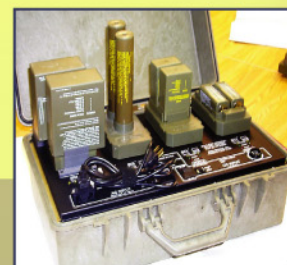
Product Lines

Portable Power for C-E, Vehicular and Aircraft Systems



Battery Chargers

- PP-8498/U**
- Plug & play for easy charging logistics. Holds 8 batteries (up to 4 types), charges 2 at a time & automatically switches to next battery in queue.
 - Top off charge feature.
 - Battery "Charge Status" provided at each battery location.
 - 4 BB-390/2590 adapters provided. Customer can customize using other adapters as required.
 - AC OR 24 VDC power inputs (AC cable provided)
 - NSN 6130-01-495-2839



- PP-8481B/U, Vehicle Mounted Charger**
- Charges two batteries at one time with additional batteries in que.
 - Two universal adapters provided. Each can hold: 2 BB-390s or 2 BB-2590, 1 BB-516, 1 BB-2847, 1 BB-388, 1 MBITR, 1 BB-2800.
 - Rugged: Immersion and loose cargo spec'd
 - AC or 24 VDC power inputs (cables provided)
 - Low voltage cut-off protection for DC operation



- Separate adapter available for bulk charging 4 BB-2590s and/or BB-390 batteries.
- PP-8481B/U NSN: 6130-01-527-2726

Solar Power Systems

Soldier Portable Photovoltaic Power Pack

- Enables the warfighter to charge the BB-2590/U batteries during day light hours when vehicle and/or generator power is not available or during silent watch operations.
 - Charges one BB-2590/U in less than six hours (conditions permitting) of sunlight
 - 10X reduced specular reflection (glint/glare)
 - Camouflage capability
 - Weight: 5 lbs. (without batteries)
 - Packed Volume: 10.5" x 8.5" x 1.4"
 - Deployed Area: 32.5" x 50"
- Kit Contains:
- (1) 55-Watt foldable flexible solar array
 - (1) Solar Charge Controller
 - (1) Battery Interface Cable



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Battery Testing

- Crush • Drop
- Short Circuit
- Shock • High Temp
- Vibration • Impact



Forced Discharge
Nail Penetration
Humidity Flame
Immersion

Vehicular Battery Maintenance Support Systems



Generators



Family of Generators

Power Supplies



- PP-6224B/U, furnishes 0-25 amperes over a frequency range of 24 to 32 Vdc from a nominal 115/230 Vac at 50, 60 or 400 Hz single phase.
- PP-2953C/U, furnishes 0-10 amperes at 24.5 Vdc from nominal 115/230 Vac at 50, 60 or 400 Hz single phase
- These power supplies are used primarily to support the SINCARS radio.

Environmental Control Units

MISSION: Provide Cooling, Heating, and Dehumidification to Soldiers and Materiel Systems in Combat, Combat Support and Combat Service Support

120K BTUH Improved Army Space Heater



- Operates on 3KW generator
- Two soldiers transportable
- Multi-fuel (JP8, Diesel)
- CO sensors and alarms
- CBP interface kit for CP DEPMEDS
- Remote Control Capability
- 360 lbs
- 120K BTUH
- CB survivable

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